IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	**Confirmation No. 2420**
Ryoumei OMOTE et al.	:	Docket No. 2000_0258A
Serial No. 09/486,890	:	Group Art Unit 1771
Filed May 26, 2000	:	Examiner Andrew Piziali
TRANSPARENT CONDUCTIVE FILM FOR USE IN TRANSPARENT TOUCH PANEL, TRANSPARENT TOUCH PANEL USING THE TRANSPARENT CONDUCTIVE FILM, AND METHOD FOR FABRICATING TRANSPARENT CONDUCTIVE FILM	:	**Mail Stop: Amendment**

RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Office Action of February 3, 2005, the time for responding thereto being extended for three months in accordance with a Petition for Extension of Time submitted herewith, Applicants submit the following remarks in support of the patentability of the presently claimed invention over the disclosures of the references relied upon by the Examiner in rejecting the claims. Further and favorable reconsideration is respectfully requested in view of these remarks.

The rejection of claims 16, 19, 28, 30, 33, 36, 42, 44, 52 and 54 under 35 U.S.C. § 103(a) as being unpatentable over Mikoshiba et al. in view of Hiraishi et al. in view of Applicants' Disclosure in view of any one of Hosokawa et al. or Dietrich et al. is respectfully traversed.

The Examiner takes the position that Mikoshiba et al. disclose that it is known in the art of touch panels to form an ITO transparent conductive film by sputtering followed by heat aging performed at a temperature of between about 100 to about 250°C. The Examiner admits that Mikoshiba et al. do not mention the surface shape of the grain aggregates, but the Examiner

states that Hiraishi et al. teach that it is known in the touch panel art to etch the conductive film in any necessary pattern. The Examiner particularly relies on Hosokawa et al. and Dietrich et al., asserting that these references disclose that it is known in the conductive film etching art to etch in a trapezoidal or rectangular pattern. Finally, the Examiner asserts that absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the etch pattern in any suitable shape, such as a trapezoid or rectangle, because it is within the general skill of a worker in the art to select a known design/ shape on the basis of its suitability.

Hosokawa et al. disclose a transparent electroluminescent (EL) device having a thin transparent film formed outside of the negative electrode. Hosokawa et al. disclose that a principal object of the invention is to provide an organic EL device having a negative electrode with low resistance and high transparency and to prevent water and oxygen from penetrating into the transparent conductive layer constituting the negative electrode. Hosokawa et al. further teach that in display devices comprising an organic EL device, pixels are formed at the intersections of XY matrices. (See column 14, line 38-40 of the reference.) The positive and negative electrodes which create the matrices are etched the give pattern lines. The transparent conductive film of Hosokawa et al. can be etched to have a trapezoidal cross-sectional profile.

Claim 16 of the present invention is directed to a transparent conductive film for use in a transparent touch panel. Applicants' invention requires a fine surface shape of the electrode surface of the transparent touch panel, as defined by the arithmetic mean roughness (Ra) and root-mean-square roughness (Rms) found in claim 16. (See also page 6, lines 4-10 of Applicants' specification.) Furthermore, the transparent conductive film has an invisible and extremely fine grain size to define the sectional shape. (See page 3, lines 14-19 of Applicants' specification.)

In contrast to the present invention, each pixel of Hosokawa et al. is visible, because if the EL display was constructed as having pixels which were not visible, the EL display would not have a display function. On the contrary, as described above, the transparent conductive film of the present invention has an invisible and extremely fine grain size to define the sectional shape thereof. If the electrode surface of the transparent touch panel of the present invention had such visible projections and recesses (as in Hosokawa et al.) the liquid crystal display (LCD) located under the transparent touch panel would be adversely affected by the visible projections

and recesses. In other words, if the transparent touch panel of the present invention included visible projections and recesses, the display function of the LCD located under the transparent touch panel would be obscured by such visible projections and recesses.

Accordingly, one skilled in the art would not apply the visible pixels of the EL display of Hosokawa et al. to cure the deficiencies of Mikoshiba et al. in view of Hiraishi et al., because visible pixels would defeat the purpose of Applicants' invention. Furthermore, for the reasons discussed above, Hosokawa et al. does not disclose any technique to realize a transparent touch panel.

Additionally, the teachings of Dietrich et al. do not remedy the deficiencies of the cited references. First, Dietrich et al. disclose a flat shape, rather than a sectional shape, wherein a cross section of grain aggregates is formed into a trapezoidal or rectangular shape, as required by Applicants' claim 16. Additionally, Dietrich et al. teaches a copper film, rather than a transparent conductive film, as required by Applicants' claim 16. Lastly, Dietrich et al. fails to teach or suggest a transparent conductive film for use in a transparent touch panel.

The Examiner has relied upon Dietrich et al. for the purpose of teaching that it is known in the conductive film etching art to etch in a trapezoidal or rectangular pattern. However, Applicants' claim 16 requires a transparent conductive film for use in a transparent touch panel, whereby a cross section of grain aggregates forming the surface shape is formed into a trapezoidal or rectangular shape. Dietrich et al. do not teach a sectional shape, and therefore the reference can not be used to render obvious the cross sectional shape as described in Applicants' claim.

For these reasons, the invention of claims 16, 19, 28, 30, 33, 36, 42, 44, 52 and 54 is clearly patentable over Mikoshiba et al. in view of Hiraishi et al. in view of Applicants' Disclosure in view of any one of Hosokawa et al. or Dietrich et al.

The rejection of claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Mikoshiba et al. in view of Hiraishi et al. in view of Applicants' Disclosure in view of any one of Hosokawa et al. or Dietrich et al. as applied to claims 16, 19, 28, 30, 33, 36, 42, 44, 52 and 54, and further in view of Yukinobu et al. is respectfully traversed.

The comments set forth above concerning Mikoshiba et al. in view of Hiraishi et al. in view of Applicants' Disclosure in view of any one of Hosokawa et al. or Dietrich et al. are equally applicable to this rejection. Since claim 21 is directly dependent on claim 16, the subject

matter of claim 21 is patentable over Mikoshiba et al. in view of Hiraishi et al. in view of Applicants' Disclosure in view of any one of Hosokawa et al. or Dietrich et al. for the same reasons that the subject matter of claim 16 is patentable over this combination of references. Furthermore, the Yukinobu et al. reference does not remedy the deficiencies of Hosokawa et al. and Dietrich et al. as discussed above.

Therefore, the invention of claim 21 is clearly patentable over Mikoshiba et al. in view of Hiraishi et al. in view of Applicants' Disclosure in view of any one of Hosokawa et al. or Dietrich et al., and further in view of Yukinobu et al.

The allowance of claims 46, 48 and 50 is noted.

Therefore, in view of the above remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

Ryoumei OMOTE et al.

By: 

Amy E. Pulliam
Registration No. 55,965
Agent for Applicants

MRD/AEP/jmj
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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